HOUSE OF COMMONS

First Session—Twenty-fourth Parliament

1958

STANDING COMMITTEE

ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Chairman: GORDON K. FRASER, ESQ.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 4

DEPARTMENT OF TRANSPORT ESTIMATES

THURSDAY, JULY 3, 1958

The Honourable George Hees, Minister of Transport; Messrs. J. R. Baldwin, Deputy Minister; Air Vice-Marshal de Niverville, Director General of Air Services; F. G. Nixon, Director, Telecommunication Branch; J. R. H. Noble, Meteorological Branch, H. J. Connolly, Director, Construction Branch.

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1958

60134-4—1

STANDING COMMITTEE

ON

RAILWAYS, CANALS AND TELEGRAPH LINES

Chairman: Gordon K. Fraser, Esq.,

and Messrs.

Allmark,
Asselin,
Badanai,
Baldwin,
Baskin,
Batten,
Bigg,
Bourbonnais,
Brassard (*Chicoutimi*),
Brassard (*Lapointe*),
Bruchési,
Campbell (*Stormont*),
Chevrier,
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McBain,
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McMillan,
McPhillips,
Michaud,
Monteith (*Verdun*),
Nielsen,
Nixon,
Pascoe,
Payne,
Phillips,
Racine,
Rouleau,
Rynard,
Smallwood,
Smith (*Calgary South*),
Smith (*Simcoe North*),
Tassé,
Taylor,
Thompson,
Tucker,
Webster,
Wratten—60.

J. E. O'Connor,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, July 3, 1958.

The Standing Committee on Railways, Canals and Telegraph Lines met at 10.05 a.m. this day. The Chairman, Mr. G. K. Fraser, presided.

Members present: Messrs. Allmark, Baldwin, Baskin, Bigg, Bourbonnais, Brassard (*Chicoutimi*), Bruchési, Chown, Creaghan, Drysdale, Fisher, Fraser, Garland, Grills, Gundlock, Hardie, Horner (*Jasper-Edson*), Howard, Howe, Kennedy, MacEven, Martini, McBain, McMillan, Monteith (*Verdun*), Nielsen, Pascoe, Payne, Phillips, Racine, Rynard, Smallwood, Smith (*Simcoe North*), Smith (*Calgary South*), Thompson, Tucker, and Wratten.—(37)

In attendance: The Hon. George Hees, Minister of Transport; Messrs. J. R. Baldwin, Deputy Minister; J. E. Devine, Executive Assistant to the Deputy Minister; Air Vice-Marshal A. de-Niverville, Director General of Air Services; F. G. Nixon, Director, Telecommunication Branch; W. A. Caton, Chief, Radio Regulations Branch; D. S. Robertson, Superintendent, Telephone and Telegrams; W. A. Cook, Budget Supervisor; J. R. H. Noble, Meteorological Branch; H. J. Connolly, Director, Construction Branch; G. W. Smith, Chief Engineer, Airport Development Division; W. A. Ramsay, Chief Architect; Architectural Division; E. Hickson, Administrator of Airports; M. Fleming, Chief, Flight Operations; L. G. Fitton, Administrator of Airways; L. R. Mattern, Air Traffic Control.

The Chairman observed the presence of quorum and with Mr. Hees and Mr. Baldwin to answer questions called item 449—Air Services—Administration.

Item 449 was adopted.

Item 637 (Supplementary)—Air Services—Administration—was called and adopted.

Item 450—Air Services—Construction Services Administration—was called and adopted.

Item 638 (Supplementary)—Air Services—Construction Services Administration—was called and adopted.

Item 451—Radio Aids to Air and Marine Navigation—Administration, Operation and Maintenance—was called and Mr. Nixon answered question.

Item 451 was adopted.

Item 639 (Supplementary)—Radio Aids to Air and Marine Navigation—Administration, Operation and Maintenance—was called and adopted.

Item 452—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and adopted.

Item 453—Radio Act and Regulations—Administration, Operation and Maintenance—was called and adopted.

Item 454—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and adopted.

Item 640 (Supplementary)—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and adopted.

Item 455—Telegraph and Telephone Service—Administration, Operation and Maintenance—was called and adopted.

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Item 456—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and adopted.

Item 641 (Supplementary)—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and adopted.

Item 457—Meteorological Division—Administration, Operation and Maintenance—was called and Mr. Noble questioned.

Item 457 was adopted.

Item 642 (Supplementary)—Meteorological Division—Administration, Operation and Maintenance—was called and adopted.

Item 458—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and A/V/M de Niverville and Mr. Noble were questioned.

Item 458 was adopted.

Item 643 (Supplementary)—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and adopted.

Item 459—Control of Civil Aviation—was called and adopted.

Item 644 (Supplementary)—Control of Civil Aviation—was called and adopted.

Item 460—Airways and Airports—Operation and Maintenance—was called and adopted.

Item 645 (Supplementary)—Airways and Airports—Operation and Maintenance—was called and adopted.

Item 461—Airway and Airport Traffic Control—was called and adopted.

Item 646 (Supplementary)—Airway and Airport Traffic Control—was called and adopted.

Item 462—Construction or Acquisition of Buildings, Works, Land and Equipment—was called and Mr. Connolly was questioned.

Item 462 was adopted.

Item 647 (Supplementary)—Construction or Acquisition of Building, Works, Land and Equipment—was called and adopted.

At 12.20 p.m. the Committee adjourned to meet again at 10.00 a.m. Tuesday, July 8, 1958.

J. E. O'Connor,
Clerk of the Committee.

EVIDENCE

Thursday,
July 3, 1958
10 a.m.

The CHAIRMAN: Gentlemen, I see a quorum.

This morning we shall go into air services and the administration division. The first item is 449 to be found at page 80 of the main estimates.

449. Air services administration $1,116,241

Mr. SMITH (*Calgary South*): Mr. Chairman, might I ask the minister or the deputy minister this question. At the last session as well as at this session we have had questions directed to the minister concerning the international air agreement between Canada and the United States, commonly known as the bilateral agreement.

Under this general item might we not ask if the minister has anything more to report in the hope that perhaps we are going to be able to sit down with the United States and work out some of the problems existing between our two countries in connection with air transportation between our major cities and those of the United States?

Hon. George HEES (*Minister of Transport*): We started talks with the United States authorities earlier this year. Unfortunately for one reason or another those talks are now bogged down. However, very recently I have spoken to the American authorities again requesting that the negotiations and talks be resumed and they have assured us of their willingness to have them resumed. So I expect that will come about.

Mr. SMITH (*Calgary South*): Might I ask the minister if it is not possible—the bilateral agreement is really quite a simple article—that in the event it is not possible to come to any firm conclusion, I assume that what would be first required would be informal discussions before more formal meetings took place.

But in the event of a collapse of these informal discussions, is it not possible to consider some of the problems on a limited discussion basis?

I noticed that the preliminary agreement makes reference to that situation because there are certain areas in this country which have been stalled for some time in their attempt to obtain air service.

Mr. HEES: We have asked the Americans to carry on discussions on a limited basis as an alternative if it should be found impossible to carry on discussions on a wider plane, and they have agreed, very recently, to continue the informal discussions which we have carried on from time to time during the year. I am confident that informal discussions will be resumed very soon.

Mr. SMITH (*Calgary South*): There is no firm date as to when the discussions will take place?

Mr. HEES: No, but I feel confident it will be reasonably soon.

The CHAIRMAN: Are there any further questions?

Mr. WRATTEN: Could the minister give us the general policy that the department follows in regard to providing assistance to airport construction?

Mr. HEES: Yes, Mr. Wratten, I have something on that, I think. Yes, this I think would be interesting to the members of the committee.

Within the limit of funds available the federal government assumes the basic responsibility for the construction of the runways, taxiways and aids to navigation for airport services by scheduled or regular services.

This applies whether the airport is federally or munipally operated. At municipal airports served by scheduled or regular services the federal government may also make a grant in aid toward public space in municipal airport terminal buildings.

The federal government also assumes responsibility for major airports required for general northern development such as at Frobisher and Aklavik.

In connection with other fields, the federal government makes small grants in aid for construction of small airstrips where genuine need exists because of remoteness, resources development, or other special needs, or where costs are somewhat more substantial. In that case it may make additional grants in aid on a cost sharing basis with the appropriate local authority.

The limit of outright grants in aid is $25,000 and any expenditure over this amount is done on a cost sharing basis with the municipality, usually fifty fifty in connection with these small airstrips. The municipality is required to provide the land and operate the field in any case, with the title to the land however being transferred for a nominal amount to the federal government.

Normally speaking an outright grant is only made where there is a strong case of need based upon remoteness or resources development. If the need is based on assistance to local business or private aircraft rather than on a measure of need, we may proceed on a cost sharing basis to be paid rather than making any outright grant.

Requests are received from municipal groups and are reviewed by departmental technicians and specialists, from the point of view of suitability of construction, technical need and so on. They are also reviewed by the economic staff of the department from the point of view of economic need, and they are then dealt with by another departmental committee, composed of representatives of the Department of Transport, the Air Transport Board, the Treasury Board, and the R.C.A.F. This board recommends to the minister the course to be followed.

The CHAIRMAN: Are there any other questions?

Mr. SMITH (*Calgary South*): Where there have been or where there are R.C.A.F. facilities permanently in use, or where there are any other air facilities, is there any attempt made by the department to work out a system for the removal of civil aviation or flying clubs to a point where commercial airlines will have the exclusive use of the municipal airports, and government controlled airports?

I suggest we have a number of areas in Canada where private flying would be happy to take up their own facilities which would serve the purpose, both in the interests of safety and also to the benefit of private flying if it could be worked out in cooperation with these other fields?

Mr. HEES: I shall ask the deputy minister to answer your question. Perhaps you would not mind waiting until we have other questions of that nature when we get under civil aviation.

Mr. SMITH (*Calgary South*): That is going back to airport construction?

The CHAIRMAN: That also is another item, Mr. Smith.

Mr. HEES: I think it would be better to wait until we get the proper officials.

Mr. RYNARD: I would like to have an interpretation of what the minister said. I would take from what he read that this would apply to summer resort business?

Mr. HEES: Not necessarily. Every case is judged on its merits. If there is a case, we will give it consideration. It is hard to generalize. The best thing to do if you have a specific case in mind, is to let the case be put forward and we will consider whether or not it is possible to give any assistance.

Mr. RYNARD: If there were business operators you would have to take it into consideration if it would improve their business?

Mr. HEES: You are talking about a grant in aid or about a cost sharing basis?

Mr. RYNARD: I was thinking particularly of where you spoke of aid to business.

Mr. HEES: Yes. If there is a case put forward by a municipality to give assistance for summer business we might consider it on a cost sharing basis. But the grants in aid are usually made because of remoteness or some reason like that.

Mr. BIGG: Do you prefer that the first overtures be made by a municipality, or is it quite in order for us to make them?

Mr. HEES: It is better that the official overture be made by them. But it is quite all right for members of parliament to ask the department about any of these matters at any time. However, the request for investigation by our officials to see what could be done should come from the municipality.

Mr. BIGG: And it should come directly to your office?

Mr. HEES: Yes, it may be sent directly to me.

The CHAIRMAN: Are there any other questions on administration?

Mr. SMITH (*Calgary South*): Is it permitted to ask a question concerning Air Transport Board operation at this time?

Mr. HEES: That will come up later.

Item agreed to.

The CHAIRMAN: There is a supplementary on this on page 12 of your supplementary estimates, item 637.

Item 637 agreed to.

450. Construction services administration $2,022,020

Mr. HORNER (*Jasper-Edson*): This I take it where the department is constructing airfields? Is that correct?

Mr. BALDWIN: This is for the unit which is responsible for the construction program and air services as a whole, such as airfields, radio aids to navigation, meteorological facilities and so on.

Mr. BIGG: This is not only administration?

Mr. HEES: Might I suggest that you people at the lower end of the table come forward so that you can hear better. Would you mind?

Mr. HORNER (*Jasper-Edson*): May we have a statement concerning the airport at Edmonton and what its present status is?

Mr. HEES: That will come up under item 462.

Mr. DRYSDALE: What does item 450 consist of?

Mr. HEES: That is for administration of the branch, salaries of the staff that operate the air construction branch.

Item agreed to.

The CHAIRMAN: Now there is a supplementary on this at page 12 of the supplementary estimates, item 638.

Item agreed to.

451. Telecommunications division—Administration, operation and maintenance $13,933,473

Are there any questions?

Mr. HEES: So that everybody may know what we are talking about, that is for telecommunications and radio aids to navigation. Does anybody wish to ask any questions about it?

Mr. SMITH (*Calgary South*): May I ask this: in the event that there are any more organizations which may require various strips for their use and weather information, has the department established a policy as to whether they are to be considered as private or commercial organizations?

Mr. HEES: That comes under the meteorological division and we have a man to answer that. It will come up under item 457.

The CHAIRMAN: Are there any other questions?

Mr. BALDWIN (*Peace River*): Under that heading could you give us a word about the proposed new project or system from northern Alberta running into the Yukon and the Northwest Territories? Is there not some suggestion of a system to be developed by the department which would come under this heading?

Mr. BALDWIN: Would you be thinking, sir, of departmental assumption of responsibility in connection with the army signal service?

Mr. BALDWIN (*Peace River*): Yes. Is there any general program with regard to it? I understand that this department has taken over the system which was formerly operated by the army along the Alaskan highway.

Mr. HEES: This should give you the answer:

> The present financial arrangement with regard to the above system is that the lump sum of $1,355,000 has been placed in the radio aids to air and marine navigation, administration, operations and maintenance vote to cover the costs for the operation of the system in the fiscal year 1958-59. This cost is based on the Department of National Defence estimate and covers the operation of the 19 stations involved in the system. While funds were provided in the Department of Transport estimates, they have been transferred to Department of National Defence for this year only, and the Department of National Defence continue to operate the stations. The 1959-60 estimates will be prepared by the Department of Transport and the breakdown thereof shown in detail in our estimates.
>
> Meetings have been held between personnel of the two departments, a joint inspection trip of the system has been made and detailed planning for the transfer is well under way. The takeover, which must be on a gradual basis in order that continuity of service be maintained, is planned for six stations in the fiscal year 1958-59 with the remainder being completed in the fiscal year 1959-60, unless unforeseen difficulties arise. The program will combine the functions presently performed separately by the Department of National Defence and the Department of Transport at ten station locations.
>
> The main economy in the operation of the combined system will be achieved at stations where two separate departmental staffs are now employed, and will result in a reduction of approximately 35 positions.

There will be a saving in salaries, housing, supplies, and so on, estimated to amount to between 10 per cent and 15 per cent annually. Furthermore, there will be intangible benefits by having the government's communication system in the north under a single authority which we anticipate will provide better service to all users.

Long-terms plans, when executed, at all 19 locations will provide modern communications equipment conforming to latest standards. Much of the present equipment has seen extensive service over the past 30 years. It is expected that when the modernization program has been completed, better service will be achieved which, in turn, will help further the development of Canada's north.

Mr. HOWE: What about the training of student operators and so on? Does the Department of Transport maintain schools for the training of these operators?

Mr HEES: I will ask Mr. Nixon, the director of our telecommunications branch, to come up and give you the answer to that question.

The CHAIRMAN: We will ask Mr. Nixon, head of the telecommunications division, to answer your question Mr. Howe.

Mr. F. G. NIXON (*Director, Telecommunications Branch, Department of Transport*): Mr. Chairman, I think the item to which the hon. member refers deals with correspondence courses that are given to radio operators.

Mr. HEES: Can everyone hear back there? Would those of you who cannot hear mind sitting at this table over here so that you will be a little closer.

The CHAIRMAN: Thank you gentlemen.

Mr. NIXON: The department does not at the present time operate a school for this purpose.

Mr. HOWE: Where would these radio operators get their practical experience? Would they be brought in after they have passed their correspondence courses? Would these radio operators have the opportunity of being hired by the department upon the completion of their courses?

Mr. NIXON: Radio operators in the department are given on the job training, but not training in a central school.

Mr. HOWE: I notice there is a reference made to students in this item.

Mr. SMITH (*Simcoe North*): Is this an apprentice training system? Do you take a man on as radio operator and bring him up to a standard on an apprentice type of system? Is that what this means when referring to student training?

Mr. BALDWIN: There are several training schemes. I was wondering which particular scheme you had reference to in detail.

Mr. HOWE: On page 570 of the details down near the bottom of the page it says, "training and refresher courses for radio operators, student radio operators and technicians—"

Mr. NIXON: That item refers to courses that are given in private schools for radio operators before entering the service.

Mr. HOWE: Would that training be given at Ryerson, or some similar school?

Mr. NIXON: This item would cover training at a similar type of school, but not at Ryerson. Ryerson is more of a technician type of school.

Mr. HOWE: What type of private school would this training be given at?

Mr. NIXON: The Radio College of Canada of Toronto is an example.

Mr. HORNER (*Jasper-Edson*): Could we have a breakdown of this item in respect of the schools that this money is being paid to and so on?

Mr. BALDWIN: I am not sure I have that breakdown in respect of this particular item. I think I have.

Mr. WRATTEN: Mr. Chairman, while he is looking that information up—

Mr. BALDWIN: Yes, I do have that information. This is broken down into a training scheme whereby, in order to bring the knowledge of mathematics and electricity up to first year college standards selected radio operators and technicians are provided courses which will enable them to acquire a more specialized knowledge in the maintenance and operation of radar and other modern equipment being installed. This amounts to $30,000. In addition there is a special training course for 60 radio technicians by Raytheon. The department was authorized to enter into a contract with Raytheon Canada Limited for the training of 60 radio technicians in the maintenance of long-range surveillance radar. These 60 technicians are given very special training in this particular type of unit. The cost involved is $123,000.

Mr. DRYSDALE: Mr. Chairman, I was interested particularly in the duties of radio operators grade 2 and grade 3 as described on page 569 of the estimates. I am interested in a general way what their duties are.

Mr. NIXON: They operate equipment at various radio stations providing services to air and marine. They also do some maintenance work on the equipment.

Mr. DRYSDALE: Are these employees concentrated at airports, or are they scattered throughout the northern country as well?

Mr. NIXON: There tends to be a concentration at some of the major airports. Gander airport is probably a good example of that. However, they are scattered throughout many, many stations across the country.

Mr. DRYSDALE: Perhaps this question is naive, but I ask it as a matter of information for myself.

What are the duties generally of a radio operator? That is exactly what I am trying to discover.

Mr. NIXON: A radio operator first and foremost provides a communication service to ships, aircraft, or to other points in the system. His secondary duty is limited maintenance work on the equipment.

Mr. DRYSDALE: Is the difference between a grade 2 and grade 3 radio operator just a matter of experience? I notice there are very few grade 1 operators. What is a grade 1 operator as distinct from a grade 2 operator?

Mr. NIXON: A grade 1 operator is simply a communicator not doing maintenance work and not possessing very great skill in the telegraph code. They progress to grade 3 , which is a fully qualified man, having full capabilities in radio telegraph, full capabilities in procedure, and full capabilities in respect of maintenance work.

Mr. WRATTEN: What guarantee do we have that these men are going to stay with the Department of Transport after this large amount of money has been spent in respect of their training? Do these men sign up for a certain length of time, or do we put them through the radio college at a cost of $150,000 and then run the risk of them quitting and going some place else?

Mr. NIXON: This particular item includes those items of training that were read out in detail by Mr. Baldwin.

Mr. BALDWIN: I think the answer to the question is that we do not really have a guarantee. We do feel that we have to provide this training in order to get the bodies.

At an earlier stage when we had to run our own schools, at some expense, because we could not get people on the open market, we tried to obtain

guarantees that they would stay with the department for a given number of years. After these people graduated—this was several years ago—things worked out reasonably well, but there were still some of those graduates that broke their agreement even then.

We now find with the same training scheme that the majority of the bodies stay with the Department of Transport and are loyal to the Department of Transport. There are always a few that drift off into other employment.

Mr. HORNER (*Jasper-Edson*): Do I understand correctly that this money is paid to the Radio College of Canada for training these operators?

Mr. HEES: The Radio College of Canada was given as one example of a training institution that we contribute to for the training of people that we use.

Mr. HORNER (*Jasper-Edson*): How many trained operators do we get as a result of the expenditure of this large amount of money?

Mr. BALDWIN: To which item are you referring?

Mr. HORNER (*Jasper-Edson*): I refer to the same item.

Mr. BALDWIN: Are you referring to the item of $151,000?

Mr. HORNER (*Jasper-Edson*): Yes.

Mr. BALDWIN: That is broken down, as I indicated. I did not quite finish the statement.

It covers tuition fees of $30,000 for a general training scheme. It covers training costs for 60 radio technicians in respect of new long-range surveillance radar who are being trained at Raytheon Canada Limited. It also covers the payment of tuition fees to various schools in Canada for training, as estimated, for 90 student radio operators on a four-month course. That amounts to $11,500.

Mr. CREAGHAN: These students, I understand, are paid some sort of a salary while they are attending school, is that right?

Mr. BALDWIN: The student radio operator item covers only tuition.

Item agreed to.

The CHAIRMAN: Supplementary item 639.

Mr. NIELSEN: Going back to the statement made by the minister with regard to the taking over of the Royal Canadian Corps of Signals operations in the north, I just wanted to ask a question in that connection. Does this include the recent bookkeeping arrangements that have been made between the Department of Transport and the Canadian National Railways with regard to the taking over of the Canadian National telegraph system along the northwest highway system?

Mr. HEES: No, that is a separate arrangement.

Mr. PHILLIPS: I notice a considerable increase in the item for overtime. There is an increase from $110,000 to $455,000. What is the main factor which is involved in that increase?

Mr. BALDWIN: The main reason for the increase in overtime is due to the general salary increase. The rate for overtime has been increased approximately 10 per cent, estimated at $35,000; payment for statutory holidays worked as authorized by section 86 of the Civil Service Commission Act amounted to $300,000; additional stations where overtime is authorized amounting to $10,000 making a total of $345,000. Those are the increases.

Supplementary item 639 agreed to.

452. Air Services—Construction or Acquisition of Buildings, Works, Land and Equipment $11,385,000

Mr. DRYSDALE: Could we have a general statement from the minister in respect of that item? What does that item deal with?

Mr. HEES: This item covers all of the construction of new equipment and new installations that we are putting in, both for flying and marine. It covers a great many different types of equipment. They are all listed here: visual Omni ranges, instrument leading systems, beacons, radar sets, transmitters, non-directional beacons. This is a complete breakdown of the various places where beacons or other equipment has been installed including the type of equipment and the amount of money spent in each case.

Mr. DRYSDALE: Does it cover a large number of places?

Mr. BALDWIN: Yes.

Mr. DRYSDALE: Are there any substantial amounts concentrated at any particular place?

Mr. BALDWIN: No. The two heaviest items are for surveillance radar equipment and for visual Omni ranges.

Mr. DRYSDALE: What is the largest single item in volume?

Mr. BALDWIN: There is $3\frac{3}{4}$ million approximately for surveillance radar sets.

Mr. HORNER (*Jasper-Edson*): Does this item apply to points right across the country?

Mr. BALDWIN: Yes.

Mr. CREAGHAN: I notice in your annual report for last year on page 1 that you were ordering 15 radar equipment surveillance installations for airports across the country. Is that what this item is for?

Mr. HEES: Yes.

Mr. CREAGHAN: The 1957 annual report states that you were going to order them.

Mr. HEES: Yes. They are being built now.

Mr. SMITH (*Simcoe North*): I would like to ask the minister if we, along with anyone else, are carrying out research in respect of aids. Are we doing anything to determine whether or not we are improving these various aids?

Mr. HEES: Yes. There is a very good exchange of information in this line right across the world. Very many countries are, as well as our own, doing experimental work. We have very good access to the results of other countries' experiments and we are equally willing to give them the results of our experiments.

Mr. HORNER (*Jasper-Edson*): I think in respect of an item of $11 million we should have a detailed statement as to where the money is going.

Mr. HEES: Which item are you referring to?

Mr. DRYSDALE: Mr. Chairman, to save time, perhaps we could have this list put in as a schedule to the minutes of this meeting.

The CHAIRMAN: I beg your pardon?

Mr. DRYSDALE: Could we perhaps have a list of the various items for which the $11 million is being spent included in the minutes of this meeting? I would suggest that that list be put in as a schedule to the report. I hope, Mr. Chairman, you will appreciate the difficulty that I, and perhaps some of the other members, have in respect of these items which, as far as we are concerned, are entirely new. When we see an item in the estimates in the amount of $11 million described in two lines, it does not convey a great deal to us. I realize that we are perhaps taking up a great deal of the committee's time. However, taking a long view of it, perhaps during the next three or four years we will be in a better position to understand these items.

The CHAIRMAN: It may take a good deal of time to go through these items, but this committee is set up to give the members an opportunity of asking for all the information which is available.

Mr. DRYSDALE: We do not necessarily need the details, but just a breakdown of the headings.

Mr. HEES: Your suggestion is a very appropriate one. This committee has been set up for the specific purpose of supplying the information that is required and we have all the time in the world.

Mr. BIGG: Are all the details available if we require them?

The CHAIRMAN: This book contains departmental information the deputy minister could perhaps give you a summary of the whole thing.

Mr. HEES: At any time that a member would like to look at this book, or to have some information taken out and given to him in respect of any of these items at all, I would be very glad to do so. All the information is here, as you can see. This book contains the main estimates, and this one contains the supplementary estimates. They contain very many pages and the typing is quite small. There is a tremendous amount of information there. This information is available to you all.

Perhaps the deputy minister could read the main headings that comprise this $11 million item.

Mr. BALDWIN: The Omni range is a unit that sends out a 360 degree signal related to our airways and is one of the main aids used by aircraft in flying along an airway. It is a means of setting a course of direction.

We installed Omni ranges as part of a nation-wide program in Charlottetown; Fredericton; Moncton; Saint John, New Brunswick; Sydney; Torbay; Yarmouth; Sherbrooke; North Bay; Langruth, Manitoba; Lakehead, Ontario; Swift Current, Saskatchewan; Yorkton, Saskatchewan; Saskatoon; Calgary; Edmonton; Lethbridge and Vancouver. Those are the points which are included in the Omni range program this year. There is a list of various amounts in respect of those installations. I could do a rapid calculation here. I would think it would amount to between $500,000 and $600,000, or slightly more than that. That is only part of the program.

In some areas we have installed those systems, and there are more installations to be done in the future.

The program also includes instrument landing systems which are the standard weather landing systems at airports. It is an installation on the ground that sends both a vertical and horizontal type of signal which aircraft coming in in bad weather must use to follow the path.

We are installing these systems at Seven Islands, Quebec; Winnipeg, Manitoba; Fort Saint John, British Columbia; Lethbridge, Alberta; Whitehorse, Yukon; Port Hardy, British Columbia and Prince George, British Columbia.

I believe the total there is a little over $100,000 for this item.

At the Lakehead, Ontario, we are installing a non-directional beacon and marker at a cost of $12,000; at Saskatoon we are also installing a non-directional beacon and marker at a cost of $14,000. That is the same type of unit.

We have a general item for radar in the amount of $4,976,000. That is almost $5 million of which $3¾ million represents this large airways surveillance radar program that I mentioned.

We also have some surveillance radar target simulators amounting to $230,000. We have 15 radar test displays at a cost of $45,000. We have some radar scan-conversion equipment at a cost of $125,000. We have some ATC display and computation equipment for use in connection with radar at a cost of $100,000.

There is a wind-up item in respect of Gander, Newfoundland for ground controlled radar at a cost of $4,000.

We have quite a large number of expenditures for tower supplies and cables in connection with radar installations. These are spread across the country at places like Halifax; Moncton; Quebec; Ottawa; North Bay; Lakehead; Kenora; Regina; Calgary and Vancouver. These are installation costs really. Again they are not totalled but a rough idea of the cost in that connection would be $600,000 to $700,000.

Mr. DRYSDALE: How much was allocated to Vancouver?

Mr. BALDWIN: I am not sure that the Vancouver surveillance radar unit is covered this year. The equipment is covered but the installation cost is not. The item for Vancouver this year is in connection with a radar and communication equipment program at First Narrows bridge amounting to $30,000.

Mr. PAYNE: Are there any installations in respect of points up the coast?

Mr. BALDWIN: Yes, there are other types of facilities as well. We have a lot of beacon assemblies and non-direction beacon items, both purchase and installation costs. These items are widely scattered across the country. Looking at the list here I see Cape Spear, Newfoundland; Ramea Island, Newfoundland; Gull Island, Newfoundland; Anticosti Island, Cape Whittle, Quebec; Pointe des Monts, Quebec; Quebec city, Seven Islands, Quebec; Westpoint; Anticosti; Esker Lake, Quebec; Ottawa; Highwind Intersection, Ontario; Churchill, Saskatoon, Lac La Ronge; Alexo, B.C.; Calgary, Comox, B.C.; Penticton; Smithers; Quesnel; Sandspit; Crescent Valley; Mystery lake; Aklavik, Northwest Territories; Contwoyto, Northwest Territories; Sawmill Bay, Northwest Territories; Revelstoke, B.C.; Grindstone, Quebec; Point Atkinson, B.C. and Amphitrite Point, B.C., as well as some small items under $5,000. Those are various types of beacons of one sort and another. The instalation costs again are roughly $831,000, or $850,000.

Mr. PAYNE: Are those beacons in respect of surface navigation?

Mr. BALDWIN: Surface and air.

Mr. PAYNE: In regard to surface and air navigation.

Mr. HORNER (*Jasper-Edson*): Where does most of this equipment come from? In what country is this equipment made?

Mr. BALDWIN: The equipment is purchased on the basis of specifications provided by the Department of Transport on tenders called.

Mr. HORNER (*Jasper-Edson*): Is installation also let on tender?

Mr. BALDWIN: This varies. The installation might be on tender call if the job is a large one, and if it is a small job we do it with our own staff, if possible.

Mr. HORNER (*Jasper-Edson*): Is most of this equipment Canadian made?

Mr. BALDWIN: This would require a very great breakdown of a large number of contracts. These items are, as I said, made by public contract. Some of the equipment is made in Canada and some is made in the United States, and some of it is made in Britain.

Mr. HEES: I might say there, wherever possible we buy Canadian made equipment. If it is not made in Canada, naturally we cannot buy it here. We give the break whenever possible to Canadian manufacturers.

Mr. HORNER (*Jasper-Edson*): That is the point I was trying to get at.

Mr. SMITH (*Simcoe North*): Assuming that there is an American and a Canadian contractor competing for a contract, is there any percentage differentiation allowed? For instance, if the Canadian contractor comes within five per cent of the American contractor, does the Canadian contractor get the contract, or is it let on strictly a lowest dollar basis?

Mr. HEES: It would vary according to the circumstances.

Mr. PAYNE: Am I correct in thinking that these contracts are called by tender?

Mr. HEES: Yes.

Mr. BALDWIN: The Department of Transport drafts the specifications and we then call for tenders on the basis of those specifications. Perhaps I could finish my answer. I only mentioned half the detailed list.

Mr. HEES: Do you want the remainder of the detail list read?

Mr. DRYSDALE: Yes, I would like it completed.

Mr. HORNER (*Jasper-Edson*): Yes.

Mr. BALDWIN: We have a great many radiophone transmitters and telephone equipment, communications receivers and transmitters in connection with the various radio stations that we operate. These are not specifically earmarked in terms of a single station or geographical unit. We buy this equipment in bulk and send it to the stations as they require it.

We have radiophone transmitters for marine coast stations in the amount of $10,000. The total cost will be $3 million. This is just our authorization to place orders.

There is an item for VHF duplex radio telephone equipment at a cost of $80,000; communications receivers of a general type for MF and HF, and VHF use at $218,000; broad band receiving antenna at $49,000; low frequency transmitters for point-to-point surface and for non-directional beacons at $200,000.

Mr. SMITH (*Calgary-South*): I wonder, Mr. Chairman, if it would be possible to hold this item open until we have had an opportunity of examining this information?

The CHAIRMAN: Do you wish the deputy minister to continue?

Mr. HEES: There is a great amount of detail included here.

Mr. HORNER (*Jasper-Edson*): Could we have a summary of this information put into the record?

The CHAIRMAN: Do you wish the deputy minister to continue? it could then be included in the minutes.

Mr. HORNER (*Jasper-Edson*): Yes, I think that would be better.

The CHAIRMAN: Would that be agreeable to the members of the committee?

(See Appendix A)

Some Hon. MEMBERS: Yes.

Mr. GARLAND: I would like to ask the minister if special consideration is given to Canadian firms who tender in respect of contracts. There was a suggestion that if a Canadian firm came within a small percentage point of being the lowest tender he should receive special consideration.

Mr. HEES: Yes.

Mr. GARLAND: The minister, as I understand, replied that it varied. Would you elaborate in that respect?

Mr. HEES: I would say that each individual case is dealt with on its own merits.

Mr. GARLAND: So it is not always a question of the lowest tender being accepted?

Mr. HEES: I would say that usually it is, yes.

Mr. BIGG: If the tender meets the specifications, I suppose?

Mr. HEES: For instance, if one item is made in the United States and in Canada and the cost is reasonably close we usually try to give the break to the Canadian company.

Item agreed to.

Supplementary item 639 agreed to.

453. Telecommunications Division. Administration, Operation and Maintenance, including contributions as Canada's share of the costs of various international radio, telegraph and telephone organizations, as detailed in the Estimates—$2,359,295.

Mr. SMITH (*Simcoe North*): There seems to be a lot of confusion in the minds of the general public and some of the members as to the division of responsibility between the C.B.C. and the Department of Transport in respect of the responsibility for the allocation of wave lengths and output of power of commercial radio and television stations. People are confused as to whose responsibility it is to decide on these matters. I think someone should make a report in respect of the policy in this matter in order to bring it more to the fore.

Mr. HEES: The Department of Transport's sphere is the technical sphere. The Department of Transport examines applications from a technical point of view and the Canadian Broadcasting Corporation board examines applications from an economical and service to the public point of view.

Mr. SMITH (*Simcoe North*): Is there likely to be any change in the responsibility in those fields?

Mr. HEES: That matter is under consideration by the government at the present time as indicated in the speech from the throne.

Mr. SMITH (*Calgary South*): Mr. Chairman, I also gather from that reply that it is the Department of Transport's responsibility in respect of VHF frequencies having regard to negotiations with the United States, for example, in determining which of these frequencies we can obtain?

Mr. HEES: That is right.

Mr. SMITH (*Calgary South*): I understood from the reply that the government of Canada is considering the possibility of retaining more of these frequencies and that we want to protect ourselves in respect of future television frequencies, is that a fair statement?

Mr. HEES: We have an agreement with the United States with respect to the allocation of these frequencies at the present time.

Mr. SMITH (*Calgary South*): I realize that, Mr. Chairman. The point I am getting at is, there has been some concern expressed that we must take some action to assure that we will have sufficient frequencies for the development of TV in the future, especially on the border.

Mr. HEES: We are continually in contact with the authorities of the United States in respect to this matter. What you are inferring, I think, is that perhaps there is a tendency on the part of the United States to steal some of our frequencies. We have not noticed anything of that nature at all. We work very closely with them; we are in constant consultation with them and I think I can assure you that we are not going to let them have any frequencies that are ours any more than they are going to let us have frequencies that belong to them.

Mr. SMITH (*Calgary South*): But there are only so many frequencies.

Mr. HEES: Frequencies are very valuable things, indeed.

Mr. SMITH (*Calgary South*): I hope we are continually keeping in mind the need to protect these frequencies in respect of future development or expansion of these fields.

Mr. HEES: We certainly are. These frequencies are very valuable and are becoming more valuable all the time.

Mr. HOWE: On page 573 of the estimates there is an item "Canada's share of the cost of—the international telecommunication union, Geneva, Switzerland, etc." There are three places involved in this item. The three places are: Geneva, Switzerland; Havana, Cuba and Geneva, Switzerland, again. What is the significance of that item?

Mr. NIXON: Mr. Chairman, Geneva, Switzerland, is the location of the headquarters of the International Telecommunications Union. The Inter-American radio office has its headquarters at Havana, Cuba. The third item, the administrative telegraph and telephone conference is being held this year in Geneva, in Switzerland.

Mr. McBAIN: Mr. Chairman, my question deals with the final authority for the granting of licences. Does the department of Transport, or the Canadian Broadcasting Corporation have the power to grant new licences for new stations?

Mr. HEES: On the recommendation of both the Department of Transport and the Canadian Broadcasting Corporation board, I have the authority for granting licences.

Mr. McBAIN: The authority falls to the Minister of the Department of Transport?

Mr. HEES: When an authorization is signed I sign it myself.

The CHAIRMAN: Are there any other questions?

Mr. WRATTEN: Mr. Chairman, has any thought been given to consolidating these technical advisers, economic advisers and all the rest of them, instead of having them running all over the place to see about putting in a radio station? Could we not consolidate that work instead of having the Department of Transport going in first and then the Canadian Broadcasting Corporation? It seems that we are paying four or five people to run out to see if there should be a radio station. Why should we not consolidate these things and have one man do the whole job?

Mr. HEES: Which particular type of investigation are you referring to, Mr. Wratten?

Mr. WRATTEN: A few minutes ago you said you sent a man out to do the technical survey. Is that right?

Mr. HEES: Well, that is done here in Ottawa from the information we get regarding the stations. We do not necessarily have to go and look at the physical facilities.

Mr. WRATTEN: What would happen then? Did you not say that the C.B.C. would make an examination as well?

Mr. HEES: The C.B.C. does an examination of the economic and social aspects.

Mr. WRATTEN: And the moral aspects too?

Mr. HEES: Whether it is economically needed or justified and whether there is a social need for more radio or more television. That is their job, and it is set forth by statute as the job that they do.

Mr. WRATTEN: I know. It might be set like that. But if we can change these statutes to bring about economy and consolidate it under either your board or somebody else, would it not be better than having three or four different people running around?

Mr. HEES: The whole matter as indicated in the speech from the throne is under very active consideration at the present time.

Mr. HOWE: In that connection, what correlation or control is there between the granting of wavelengths in Canada and the granting of wavelengths in the United States and increasing power, where there is a station already established?

Mr. NIXON: Sound broadcasting services to which you refer, that is, radio, are controlled by the North American broadcasting agreement which is composed of countries in North America. On the other hand, television comes under a bi-lateral agreement with the United States.

Mr. SMITH (*Simcoe North*): I take it that the C.B.C. hears an application for a new radio station and they decide whether the community needs it and whether there is a fair chance of the station being operated economically. But do they make any recommendation as to the wavelength or the power, or is that entirely within the province of the Department of Transport?

Mr. HEES: That is part of the technical aspect which we examine before the application even goes to the C.B.C. That is information we supply to them, to the C.B.C., when the application goes forward.

Mr. SMITH (*Simcoe North*): Do you supply them with a recommendation?

Mr. HEES: There is a general technical committee which is composed of representatives of the Department of Transport and the C.B.C. which reviews the whole thing.

The CHAIRMAN: Are there any other questions?

Mr. HORNER (*Jasper-Edson*): Does the Department of Transport control these new micro-wave links and the technical aspects of them?

Mr. BALDWIN: Yes.

Mr. HEES: Yes. Anybody who receives a licence for them gets it from us.

Mr. RYNARD: I wonder who makes the first decision? For instance, I know a station that has been recommended quite recently for an increase in power and I am also certain that they did not follow out all the social measures in that particular area, because I have a whole sheaf of complaints. Will the C.B.C. put through an increase in power for that station, and if so, will it come back to you, and what are you going to do with it? Are you going to accept their recommendation, and that their technicians have checked it? How are they doing to check it from Ottawa if they have not been up there on the job? Are you going to accept the recommendation of the C.B.C.?

Mr. HEES: I shall ask the deputy minister to explain.

Mr. BALDWIN: We check it from the technical point of view to see whether it conforms with the technical requirements and the type of thing that Mr. Nixon mentioned in terms of distribution, signal strength, interference, and so on.

The matter is then referred to the C.B.C. for their advice on the question of whether it is or is not a good thing in their opinion from the point of view of the public. They have nothing to do with the technical aspect.

That advice then comes back to us and it is considered; and if something should turn up to indicate that it is not in accordance with the requirements, we investigate it and then the C.B.C.'s recommendation would come back to the minister.

I cannot answer the question beyond that, because the minister would have to state what he does with the recommendation that he receives.

Mr. HEES: He gives them very serious consideration!

Mr. RYNARD: Then it travels a very tortuous course.

Mr. HEES: I could not agree with you more, Mr. Rynard.

Item agreed to.

Item 454. Radio Act and Regulations. Construction or acquisition of buildings, works, land and equipment—$515,000.

Mr. HORNER (*Jasper-Edson*): Where are these buildings being built, and where is the land?

Mr. BALDWIN: A standards laboratory building at Ottawa will cost $150,000; the relocation of a monitoring station in Prince Edward Island will cost another $100,000. The balance is spread between various monitoring stations such as at Baker lake, $80,000, for electric power; Port Arthur, further expenditures on a monitoring station, and another station up there to cost $35,000.

These monitoring stations, incidentally, are stations which we have to maintain to make sure that all broadcasting going on, whether it be public or private, conforms to wavelength requirements and does not cause interference.

Mr. HORNER (*Jasper-Edson*): May I ask the reason for the relocation of the monitoring station in Prince Edward Island.

Mr. BALDWIN: Yes. There was a very high noise level and industrialization in the area where the old station was located. This sometimes happens. You may locate a radio station and in anywhere from five to fifteen years a lot of development and building takes place in the area. You soon find a lot of interference is caused when the station is in an area where there is a lot of equipment.

Item agreed to.

Items 640 and 455 agreed to.

Item 456. Telegraph and telephone service. Construction or acquisition of buildings, works, land and equipment—$198,000.

Mr. BIGG: Is this construction of telephones only in the Northwest Territories, or is there any provincial construction involved?

Mr. BALDWIN: No. This is the sum which is related to the small operation of the government-owned telephone and telegraph system which still exists. The great majority of them have been disposed of. I think the large proportion of this item is in the Magdalene islands because the only system there is the government system.

Item agreed to.

Item 641 agreed to.

Item 457. Meteorological division. Administration, operation and maintenance, including grants as detailed in the estimates—$10,708,161.

Mr. HEES: Mr. Noble of the meteorological division will answer any questions relating to this item.

Mr. DRYSDALE: I noticed in the annual report a considerable shortage of trained meteorologists. Is there a sufficient number being supplied by the universities for the general need in Canada, and if not, is there a system of assistance to encourage students to go into this particular phase of activity?

Mr. J. R. H. NOBLE (*Chief, Administration Division, Meteorological Branch, Department of Transport*): Mr. Chairman, this last year there has been a noticeable improvement in the recruiting of potential meteorologists from Canadian universities. In addition, we have been successful in recruiting a small number from the United Kingdom and from United Kingdom services. The situation is still difficult but it is improving.

Mr. DRYSDALE: I understand that at one time, a few years ago, students were assisted in going into meteorological work. Is that assistance still being continued?

Mr. NOBLE: That assistance is being continued in that young graduates coming directly out of university are taken on in a training capacity. They attend special courses given by the University of Toronto in their school of graduate studies. The courses are designed to train men in the special skills necessary.

These men receive pay while at the university taking this training. The university at the same time is following the prescribed course of study as authorized by the University of Toronto in its school of graduate studies.

Mr. DRYSDALE: Is there any provision made for the payment of an educational grant? How long does the meteorologist have to stay with the department? Is there any limitation?

Mr. NOBLE: There has not been a limitation placed on it, but experience has shown that the boys, having selected that type of work, tend to stick with it.

Mr. DRYSDALE: How do government salaries compare with what a man might receive in the every day world of business? Is there a comparable situation?

Mr. NOBLE: That would be awfully difficult to assess, because, after all, the Canadian field of employment for meteorologists is primarily the Department of Transport.

Mr. DRYSDALE: You mean the Department of Transport is the sole field?

Mr. NOBLE: There are a couple of private firms in Canada at the present time which are getting into this work, private operators; but it is exceedingly difficult.

Mr. WRATTEN: Where are the meteorologists stationed?

Mr. HEES: All over the country.

Mr. NOBLE: I could give you a summary of them by main centres. These are at Vancouver, Whitehorse, Edmonton, Winnipeg, Toronto, Montreal, Moncton, Halifax, Goose, and Gander. This is not a complete list, but it embraces the major ones.

Mr. WRATTEN: May I ask what these people do? I am only an ignorant boy from the country, and I would like to know.

Mr. HEES: Well, they forecast the weather.

Mr. WRATTEN: Some of them do not guess it right at different times.

Mr. HEES: The meteorological branch is involved in all phases of meteorological services for civilian and military purposes in Canada, for shipping in adjacent ocean areas, the Great Lakes, and for international aviation over the Atlantic and Pacific oceans.

The services include:

1. Public weather forecasting, which is summarized from two to four times daily for 20 key cities and 77 public weather regions covering all the separate parts of Canada.

2. Marine weather forecasting for shipping in the Atlantic and Pacific coastal waters, the St. Lawrence, the Great Lakes, Hudson Bay, and some of the larger interior lakes.

3. Weather forecasting for special interests, particularly agriculture, transportation and forestry.

4. Meteorological services to the Royal Canadian Air Force, Royal Canadian Navy, the army, and the Defence Research Board.

5. Weather observing and forecasting for domestic aviation, for trans-Atlantic, trans-Pacific and trans-Polar aviation. This includes the purely meteorological part of the operation of two weather ships on the Pacific.

6. Such research projects as may be necessary to meet the meteorological requirements of agriculture and industry as well as the meteorological requirements of all Canadian departments.

7. The provision to the sources outlined to us of information and advice on the climateology of Canada and of foreign countries, and the publication of statistical meteorological data for all parts of Canada.

8. The design, and where necessary, the assembly of weather instruments to meet special conditions experienced in Canada and the repair and maintenance of meteorological equipment.

9. The training of technical and professional meteorological personnel in order to carry out these meteorological services and functions.

10. Canadian representation in international meteorology, particularly in the work of the world meteorological organization and the International Civil Aviation Organization.

The CHAIRMAN: Does that cover what you wish, Mr. Wratten?

Mr. WRATTEN: It covers it all right.

The CHAIRMAN: It is only a wise man who asks questions.

Mr. HOWE: Might we have an explanation of these weather observer contracts mentioned on page 578?

Mr. NOBLE: On occasion it has been found more economical to contract with a commercial agency such as an airline company, a communication agency, or an educational agency for the provision of weather information, that is to say, basic weather observations. It is more economical to contract with an agency such as that than it is to employ full time departmental staff.

What you are referring to here, I take it, is the amount of money which is spent on that basis each year?

Mr. DRYSDALE: In view of the report that there is no very severe shortage of meteorologists, would you care to estimate how many would be required to bring Canada up to the optimum standard?

Mr. HEES: Mr. Noble tells me that we estimate that we are 40 short at the present time, and that we hope to get men enough by next year.

Mr. DRYSDALE: What efforts are made by the department at the undergraduate level to interest students in becoming meteorologists?

Mr. BALDWIN: We send a special team out to the universities during the course of the winter.

Mr. DRYSDALE: What type of economic requirement is necessary? A Bachelor of Arts or Science, or what?

Mr. BALDWIN: Mathematics and physics.

Mr. PASCOE: On page 578, Canadian National Exhibition display, is that solely for the exhibition at Toronto, or could it be displayed at other exhibitions?

Mr. HEES: That is just for Toronto.

Mr. PASCOE: It could not be moved to any other exhibition?

Mr. HEES: If we got additional money for it we could do it.

Mr. PASCOE: Does it cost that much for any other display?

Mr. HEES: There has been no inclination on the part of the treasury board so far to allow us to extend this expenditure to other places.

Mr. HORNER (*Jasper-Edson*): I notice in the annual report where there is cooperation in the study of hail formation in Alberta in 1957. Is there any report on that study having to do with hail?

Mr. NOBLE: There is a preliminary report on the accomplishments in he summer just past. In addition, the investigation is continuing this year in cooperation with the National Research Council and the Research Council of Alberta.

We are rather optimistic about the work that is being done out there. It is a research problem. As it stands at the moment we expect let us say, by this time next year—in other words, when this year's operations are completed—that we would have a pretty good report. I would not like to forecast what the outcome of the thing will be.

Item agreed to.

Item 642 agreed to.

The CHAIRMAN:

Item 458. Construction or acquisition of buildings, works, land and equipment—$1,089,600.

Are there any questions on this item?

Mr. DRYSDALE: Perhaps we might have a general statement.

Mr. BALDWIN: Summarizing it briefly, this item is related to the supervision of technical equipment for meteorology in the main and in construction at various meteorological stations, for example: at Isachsen in the Northwest Territories, $35,000 will be required to complete the resiting of the station.

At Mould bay in the Northwest Territories, $22,000 will be required to complete the station improvements.

At Banks Island, Northwest Territories, $17,000 is required for station improvements which include an underground natural refrigeration reefer for the storage of meats, radio beacon masts and antennae and shipping charges.

Roughly speaking, out of a total program of $300,000 to $400,000 the expenditure this year will be a little under $100,000.

For the expansion of the radiosonde training establishment at Toronto, $27,000 will be required. This training establishment is for the operators who follow the radio-bearing balloons which have to be sent up.

A sum of $30,000 is required for the meterological installation at Gander, which is installed at the end of the runway to give information on ceiling and visibility conditions.

The station at Sable Island, Nova Scotia will require a further $20,000 for completion.

There is an amount of $160,000 for housing at Goose, and an enlargement of facilities there to the extent of $20,000. We are doing the weather forecasting there by means of a closed circuit.

There is a wide variety of station improvements and, either housing or buildings, for radiosonde or power plants of hydro-generators to supply the needs of our housing such as at Moosonee, Baker lake, The Pas, Fort William, Chesterfield, Aklavik, Norman Wells, Grand Prairie, Coppermine, Prince George, and St. Hubert, Quebec. These are the main locations. It breaks down at this point into the housing of our equipment, and buildings to support meteorological operations.

Mr. DRYSDALE: Are any of the meteorological services revenue producing?

Mr. BALDWIN: Not this type of service. But in our climateological section where we are called upon to do a special study for industries, such as an insurance company, which may want to know the frequency with which ice conditions occur, for the purposes of setting a rate on motor car insurance, for example, we do charge our out of pocket costs for the job they ask us to do.

Mr. CREAGHAN: With respect to this present item could the director tell us how many family dwellings the department has at Goose Bay and what space is available for married personnel there?

Mr. BALDWIN: I would not know off hand the figure. I would have to get it together from the different branches.

Mr. CREAGHAN: I meant for meteorology only.

Mr. BALDWIN: There are 24 now available; there are three double ones one planned for this year, which would make the today number 30.

The CHAIRMAN: Are there any further questions?

Mr. CREAHGAN: Is it possible for the employees of your radio department to occupy any of these houses that come under the meteorological branch at Goose? I understand that from time to time you take personnel from the Moncton area and post them to Goose Bay. They are married yet they cannot find space. At that post there may be vacant houses belonging to the radar or radio branch. Nevertheless the meteorological men cannot get into them.

The CHAIRMAN: I shall ask Air Vice-Marshall A. de Niverville, to answer you.

AIR VICE-MARSHAL A. DE NIVERVILLE (*Director of Air Services, Department of Transport*): Mr. Chairman, if I understand the question correctly, the answer is: the meteorological director is responsible for the quarters at Goose Bay. While some quarters may have been built to meet the needs of a certain branch, if by any chance the meteorology men do not occupy those quarters the director may reallocate them to the radio operator who is reporting for duty at that time.

As to why married quarters may be included in certain branch estimates, they may not necessarily be occupied by the personnel of that branch. For example, at Goose Bay there is a rule in force which gives the agent the responsibility for reallocating the quarters from one branch to another in the event of the branch for which the quarters were built—there is a rule that quarters are not to be left vacant for more than two months.

The CHAIRMAN: Are there any further questions?

Mr. CREAGHAN: In other words, am I right in assuming that if the Department of Transport sends a radio operator up there, and he is a married man and he cannot get his family up there because "radio" does not have any vacancy of dwellings, he can get a vacant dwelling allocated to him by the meteorology branch after a two months waiting period?

Mr. DE NIVERVILLE: Yes, that is right, if the quarters are not wanted. No quarters are supposed to be left vacant for more than two months. They may be reallocated to him from another branch.

Item agreed to.

Supplementary item 643 agreed to.

459. Control of Civil Aviation, including the Administration of the Aeronautics Act and Regulations issued thereunder—$1,866,255.

Mr. DRYSDALE: Could we have a general statement in respect to this particular item?

Mr. HEES: Again this is a vote to provide for the salaries of the director and headquarters personnel that administers this civil aviation division here in Ottawa.

Item agreed to.

Supplementary item 644 agreed to.

460. Airways and Airport—Operation and Maintenance—Civil Aviation Services, and to provide, notwithstanding the Financial administration Act or any other act, that the Treasury Board may authorize arrangements to be made for the operation of hotel, bakery, restaurant, staff messing, staff accommodation and similar facilities at airports and may authorize the disbursement of revenues derived therefrom and payment of deficits that may occur in the management and operation of these facilities—$14,342,200.

Mr. SMITH (*Simcoe North*): I will ask a question on behalf of Mr. Smith from Calgary South concerning the use of Department of Transport airfields by flying clubs. What is the policy, or is there a policy of the Department of Transport in respect of landing facilities or space at these fields?

Mr. BALDWIN: They are considered on the same basis as any other aviation industry in the sense that they may use the airfield. They are allowed to rent certain war surplus hanger space that we acquired from the air force on a $1 per day basis for their club activities because they are encouraging civil aviation without any profit motive. In return for that special assistance they either have certain restrictions on their activities, in the sense that they do not go into commercial business. but are flying clubs which consist of members who encourage flying.

Mr. SMITH (*Simcoe North*): I think that answers the question.

Mr. DRYSDALE: What portion of this item would relate to the Vancouver airport?

Mr. BALDWIN: Not very much, sir, because the Vancouver airport is operated by the city of Vancouver. The city takes care of the operating costs in respect of that airport.

Mr. HORNER: (*Jasper-Edson*): How many airports are there in Canada of that type? Do all the major cities in Canada look after their own airports?

Mr. BALDWIN: No, that is the exception rather than the rule, sir.

Mr. MCBAIN: I recall that in the past there was a certain amount of criticism levelled at the Department of Transport in respect of the inadequacy of certain facilities at its airports. I was just wondering whether the minister has found that criticism to be justified, and if so, have steps been taken to correct the situation?

Mr. HEES: I take it you are talking about air terminal facilities—waiting rooms and so on?

Mr. MCBAIN: Yes.

Mr. HEES: As fast as we possibly can we are enlarging facilities all over the country in an attempt to keep pace with the tremendous growth of the aviation industry. I have a progress report here in respect of the main terminal buildings which you might be interested in.

This report will concern practically all members. St. John's, Newfoundland —new building will be completed this year; Gander, Newfoundland—new multi-million dollar building will be completed this year; Stephenville, Newfoundland—new building completed last year; Halifax, Nova Scotia—contract let this spring for new building, which should be finished some time in 1960; Moncton, New Brunswick—new building completed around 1954. Some further extension contemplated; Seven Islands, Quebec—new building completed last year; Quebec city, Quebec—new building completed last year; Ottawa—new building well advanced. Should be at least partially operational next winter; Montreal—new building is well advanced and the contractor is now working on the interior. We hope it will be operational, at least partially, during next winter, or during the winter of 1960. A contract for the aeroquays for aircraft parking and loading will be let this summer.

I can explain just what these aeroquays are. This is a new idea in aircraft handling. There will be four aeroquays or separate loading buildings in addition to the main terminal building which will be connected by underground tunnels. The aircraft will park on the four sides of these four aeroquays allowing a great many more aircraft to load and unload at any particular time. It will increase the capacity of the airport tremendously.

Toronto—plans for new buildings now being perpared by architect. We hope to call for tenders before the end of the fiscal year; Windsor—new building completed this past winter; Lakehead—new building completed two or three years ago; Winnipeg—plans for new building are presently being prepared by the contractor. The first tender is expected before the end of the present fiscal year; Saskatoon—new building completed two years ago; Regina—contract for new building to be let this summer; Edmonton—contract for new building at new airport to be let next year; Calgary—new building completed by the municipality two years ago on the basis of federal financial assistance; Vancouver!

Mr. DRYSDALE: Thank you.

Mr. HEES: A new building was completed by the city last year on the basis of federal financial assistance; Victoria—a contract for a new building to be let next winter or spring; Comox, B.C.—new building completed over a year ago; Port Hardy, B.C.—contract for new building to be let this summer and Sault Ste. Marie, Ontario—contract for new building to be let next year.

That gives you some general idea of what is going on in the realm of airport construction across the country. This is a tremendous program and although at various places you may feel we are not keeping pace with the needs of the community, we stagger the treasury board from to time. I can assure you that we will look after the needs of various airports across the country just as quickly as we can get money to do the job.

Mr. DRYSDALE: Mr. Chairman, with regard to the airports that are operated by cities or municipalities as contrasted with those airports operated by the Department of Transport, is there any difference as to the provision of capital expenditures? In other words, does the Department of Transport do the construction in either case, or do the cities and municipalities contribute to the construction themselves?

Mr. BALDWIN: The basic runway and taxiway requirement for purposes of flying at the main airports is considered to be a federal responsibility whether the airport is one of our own or whether it is a municipal airport. That statement relates only to the basic, as I said, runways and taxiway pattern, approach lights, landing lights and aids to navigation.

The Department of Transport would provide those at Vancouver just as though it was a Department of Transport operated airport. In respect of other items which may be required we expect the city or municipality to take care of them, except that in the case of a terminal building, if the treasury board approves, we may grant something towards a part of the cost of the terminal building, but only a part.

Mr. DRYSDALE: In regard to an airport such as the Vancouver airport where there is a Royal Canadian Air Force installation, is there a contribution on the part of the two government bodies in respect of the construction and maintenance of the airport?

Mr. BALDWIN: No. The Department of Transport acts as the unit which does the building at Vancouver. If the military had a special military requirement for construction they would come to us and say, "Here is the money. We need this for military purposes" and we would do it.

Mr. DRYSDALE: You are referring to items such as the lengthening of runways to handle jets?

Mr. BALDWIN: If it was a military requirement only and not civilian, they would be expected to pay for it and we would do the job for them.

Mr. DRYSDALE: I would like to ask a question in respect to the item appearing on page 521, professional and special services. I wonder if we could have an explanation as to what this item consists of?

Mr. BALDWIN: This item is under which heading sir?

Mr. BALDWIN: Under the heading, "control of civil aviation". It appears on page 581.

The CHAIRMAN: This has to do with item 460.

Mr. BALDWIN: Item 460—professional and special services. That comes under the previous item. I can get that information for you.

Mr. DRYSDALE: I am sorry.

Mr. BALDWIN: That is all right.

It covers the hiring of legal assistance, special technical advisers, court reporters and other associated costs. The investigation of flying mishaps at a cost of $25,000, is the largest portion of this item.

Mr. DRYSDALE: Would the Mount Slesse disaster in British Columbia be covered under this item?

Mr. BALDWIN: No. This will primarily cover in part the cost of inquiring into the accident at the small town outside of Quebec city, and the cost of similar boards of inquiry that we may have to set up.

Mr. MCBAIN: Could we have a breakdown of the revenues received from the operations of these airports?

Mr. BALDWIN: Yes, we kept a statement of each individual airport, sir. I do not have that information here because there are so many airports. We do keep individual records.

Mr. MCBAIN: Could we be given a statement as to the over-all picture between the operating expenses and revenue from the operation of airports?

Mr. BALDWIN: Yes, The total revenue figure I have here, sir, is the figure for—

Mr. HEES: The revenue from all sources during this past year was almost $7 million. If you want to know about a particular airport in respect of profit or loss, I have that information here also.

Mr. MCBAIN: I was not particularly interested in a particular airport, I just wanted to know the over-all picture.

Mr. HEES: I can give you the over-all picture right here. The total revenues were $6,853,000. These figures are in connection with the past year. The total revenue was $6,853,000. The operating and miscellaneous expenses excluding depreciation were $10,729,000 for a net deficit of $3,867,000.

Mr. CREAGHAN: What was the over-all loss or profit in respect of the Dorval airport?

Mr. HEES: The Dorval airport made a profit of $388,000 last year.

Mr. DRYSDALE: Have you the figures for the Vancouver airport?

Mr. HEES: Yes, just a minute.

Mr. HORNER *(Jasper-Edson)*: Do you have the figures for the Edmonton airport, or is that municipally operated?

Mr. HEES: If you would like me to give you the ones that made money, I can do that.

The CHAIRMAN: Have you the figures in respect of the Edmonton airport?

Mr. BALDWIN: The Edmonton airport is operated by the city.

Mr. HEES: The Fort Chimo airport in Quebec made a profit of $941.

The Dorval airport made a profit of $388,494; Malton airport at Toronto made a profit of $548,435; the Mount Hope airport, believe it or not, made a profit of $2. I do not know how that happened. The Winnipeg airport made a profit of $147,591.

Those are the only airports that made profits.

Mr. CREAGHAN: What was the loss at the Moncton airport?

Mr. HEES: The Moncton airport had a loss of $57,664.

Mr. TUCKER: Could you give us the loss at the Gander airport?

Mr. HEES: The loss at the Gander airport amounted to $35,291.

Mr. DRYSDALE: Mr. Chairman, this is perhaps a matter of policy, but is it known whether or not the majority of municipally owned airports operate at a profit or at a loss?

Mr. BALDWIN: To the best of my knowledge the Vancouver airport, the Calgary airport and the Edmonton airport—which are the three most important in the west—operated at a small profit. The airport at Regina operated around the break even point, I would think. I am not too sure with regard to the Fredericton and Saint John Airports, but I would say again that they operated pretty close to the break even point.

The Department of Transport pays a small subsidy to an airport that has an operating loss. If that operating subsidy was taken away in cases where there is an operating loss, places like Fredericton and Saint John would be showing a loss.

Mr. DRYSDALE: Would the Department of Transport prefer to operate the airports that are presently municipally owned?

Mr. HEES: I might say that that is a question I am asked by the press and the municipal officials every time I go to Vancouver. The answer I have given them I will repeat here again. We are very happy to have the city of Vancouver operating the airport there.

Mr. DRYSDALE: Would it be fair to say then that wherever a municipality or a city is desirous of operating its own airfield the Department of Transport is quite happy to let them take over that operation?

Mr. HEES: That is quite true. We are very happy to have them do it.

Mr. DRYSDALE: In other words the profitable operations are municipally owned and the Department of Transport tends to adhere to the operations that are not profitable?

Mr. HEES: We operate a few profitable airports. The Dorval airport makes a profit; the Toronto airport makes a profit, and there are two or three other ones that I mentioned earlier.

What usually happens is, if there is an airport operating at a loss pressure is brought to bear on the government to take it over.

Mr. GARLAND: In which category is the North Bay airport in respect of profit or loss?

Mr. HEES: The North Bay airport had a loss of $132,684.

Mr. HORNER *(Jasper-Edson)*: What is the status of the Saskatoon airport, is it municipally owned or otherwise?

Mr. HEES: That airport lost $81,280.

Mr. BASKIN: Mr. Chairman I would like some information regarding the airports at Killaloe, Lake Centre and Arnprior. Do they come under the jurisdiction of the Department of Transport, and is any use being made of those particular fields at this time?

Mr. BALDWIN: The Killaloe airport is the only one that comes under the jurisdiction of the Department of Transport.

Mr. BASKIN: There have been rumours in my constituency for a number of years regarding the Killaloe airport, that the Department of Transport proposes to build proper runways there. Is there any truth to those rumours?

Mr. BALDWIN: There is nothing under consideration in that regard at the present time. There is very little use being made of that airfield at the present time.

Mr. BASKIN: What use is being made of it?

Mr. BALDWIN: It is only a grass field. Light aircraft go in there occasionally but we have had no requests for improving the field there.

Mr. CREAGHAN: I wonder if perhaps the air marshal could explain in a general way what charge the Moncton airport would make to a private company operating a BOAC that was flying over the Moncton area and because of bad weather had to make an emergency landing there?

Mr. DE NIVERVILLE: The standard landing fees are charged. If this aircraft made its first landing at Moncton coming from overseas it would have to pay the regular Atlantic crossing fees.

Mr. CREAGHAN: In round figures what would that landing fee amount to?

Mr. DE NIVERVILLE: I am afraid I do not know.

Mr. BALDWIN: The charge would depend very much on the size of the aircraft. If you are thinking of a stratocruiser I would guess that the landing fee charged would be $150.

Mr. DE NIVERVILLE: I have not got the book with me and cannot give you the exact charge, but it would be in that neighbourhood.

Mr. CREAGHAN: Do landing fees represent the main source of revenue at airports?

Mr. DE NIVERVILLE: An airport's source of revenue is landing fees, operation of concessions, rentals, and parking areas.

Mr. HEES: Parking seems to be a profitable item. I gather from the number of people that park at these airports that it is very profitable.

Mr. BASKIN: What does the operation of the Killaloe airport cost the Department of Transport annually at the present time?

Mr. BALDWIN: I do not have a breakdown of that but it is relatively small because we operate a radio range up there anyway.

Mr. GARLAND: Mr. Chairman, I wonder if the minister or one of his officials would care to comment on the suggestion that the North Bay airport being operated as a joint development between the Department of Transport and the Department of National Defence is a contributing factor to the loss suffered there?

Mr. HEES: No.

Mr. GARLAND: That fact does not affect it in any way?

Mr. HEES: No, not a bit.

Item agreed to.

Supplementary item 645 agreed to.

461. Airway and Airport Traffic Control ..... $ 5,115,231

Mr. PASCOE: Mr. Chairman, I represent a constituency that has a very large NATO training airport with many planes in the air night and day. It is very close to a commercial airline. I wonder if the minister could make a statement regarding the steps taken by the Department of Transport to avoid air collisions and maintain flying safety?

Mr. HEES: I have a statement I can give you in that regard.

Control over flying to avoid airborne collisions is achieved in several ways. There are general rules which apply to all flying, specific rules which apply to flying off the airways, specific rules which apply to flying on the

airways, and specific rules applicable as between flying in "VFR", which means good weather, and flying in "IFR", which means bad weather, when visibility from the aircraft is restricted.

In addition, certain airways and air routes, which are roads in the air are marked out across Canada and are served by several radio aids to navigation so that aircraft may check their position, maintain course, and, in turn, be directed by ground organization of air traffic control. This is divided into several centres across Canada, each with responsibility for a major area; and into supplementary local airport control tower organizations, which handle incoming and outgoing traffic at and in the immediate vicinity of each airport. The air traffic control staff also provides certain general information and assistance to aircraft which are not flying on airways, but their main task is control of flying on the airways.

Off the airways, the rules provide that according to direction of flight (the compass being divided into four sectors for this purpose) certain specific altitudes must be maintained, the air space being divided into 500-foot vertical bands for this purpose. By this means altitude separations between aircraft is maintained according to their direction of flight as a means of avoiding collision. Similar rules exist on airways according to the direction of the airway and the direction of flight. Also planes crossing an airway must also fly at specified altitudes, which are different from the altitude laid down for flight along the airways.

These rules apply to both civil and military aircraft. There are approximately 21,000 miles of airways and air routes in Canada. There are eight traffic control centres; in addition the Department of Transport operates 27 control towers and the R.C.A.F. operates 28 control towers. There are now a total of over 800 employees in the Department of Transport air traffic control division, as compared with about 300 employees four years ago.

During bad weather conditions when aircraft must proceed by instruments, constant control of all aircraft on airways is maintained. In addition, if an aircraft is flying on the airways, regardless of whether the weather is good or bad, it must operate under the direction of the air traffic control system if flying between the altitude of 9,500 feet and 23,000 feet. All aircraft using this air space know that they are under positive "separation" control.

Previously, under visual flight conditions, full control of this sort had not been exercised on airways. This rule has not existed in the United States.

A standing committee, composed of the Department of Transport and the Royal Canadian Air Force representatives, provides a common basis for the civil-military approach to air regulations and control procedures and also assists in working out plans for R.C.A.F. or civil training to be conducted in areas off the airways; and for procedures to be used which ensure that in cases where a training school is on the airway, the approach and departure of training aircraft is separated from regular military or civil flying on the airway. Large military training operations or operational exercises are handled in air space specially reserved, temporarily, for the purpose from which normal civil traffic is excluded during this period.

The installation of 15 airport and airways surveillance radar units, which will provide air traffic control with substantial coverage of the coast to coast airways system, has begun, and when it is completed it will mean that on the transcontinental airways not only will air traffic control, as in the past, have a flight plan record and voice check with aircraft on airways, but there will also be a means of visual checking by radar on aircraft movement.

Mr. PASCOE: Just to follow that up, because of these airway controls, does the presence of large R.C.A.F. airfields limit or in any way hinder the expansion of commercial air services in the vicinity?

Mr. HEES: It might. We would have to examine each airport separately.

Mr. DE NIVERVILLE: Following the Moose Jaw accident a few year ago—

Mr. HEES: Mr. Pascoe is from Moose Jaw and is particularly interested in that area.

Mr. DE NIVERVILLE: We have a big airport out there. There was a bit of a dog leg put in there to provide the air force with a little more flying space. This meant, in addition to the airway, that they had possibly 15 miles. There was a little deviation made from the original airway to give the air force training station a better opportunity for training.

Mr. PASCOE: I was thinking particularly in regard to the expansion of commercial air services in Moose Jaw.

Mr. HEES: In respect particularly to Moose Jaw it certainly will not have any effect.

Mr. DRYSDALE: Mr. Chairman, I wonder if Mr. Baldwin could give us some illustration in respect to the two items, "materials and supplies", in the amount of $2,813,000, and the item covering "repairs and upkeep of equipment", in the amount of $1,380,000. These items come under vote No. 460 with the details appearing on page 585.

The CHAIRMAN: We are on vote 461.

Mr. HEES: We passed that item but we will come back to it.

Mr. DRYSDALE: I am sorry, I have difficulty in keeping track of these.

Mr. HEES: We will do anything to accommodate, the customer is always right.

Mr. DRYSDALE: Does the second item cover the utilization of the first item?

Mr. BALDWIN: The item covering materials and supplies breaks down roughly in the following fashion; coal, coke and wood, $675,000; fuel oil, $515,000; coal oil, $5,000; gasoline, $225,000; aviation gasoline, $275,000; oil and grease, $60,000; diesel fuel oil, $415,000; provisions, $386,000; medical supplies, $1,105; containers, $90,000 and items of that sort.

Mr. DRYSDALE: And the item covering repairs and upkeep to equipment includes what?

Mr. BALDWIN: That item covers the cost of 62 automobiles; 96 snowblowers; 5 cranes; 7 buses; 15 rollers; 5 snowmobiles; 539 trucks; 2 shovels; 46 graders; 317 tractors; 6 shopmules and that sort of thing.

The CHAIRMAN: Is that the whole list?

Mr. BALDWIN: There are a lot more items listed here.

Item agreed to.

Supplementary item 646 agreed to.

462. Airways and Airports—Construction or Acquisition of Buildings, Works, Land and Equipment, including Construction Work on Municipal airports to Municipalities as contributions towards construction done by those bodies, and amounts to be paid in settlement of claims for compensation by persons whose property is injuriously affected by the operation of a zoning regulation made under authority of paragraph (j) of subsection (1) of section 4 of the Aeronautics Act—$61,348,000.

Mr. HEES: Perhaps I should ask Mr. Connolly to come up and answer any questions with regard to this item.

Mr. DRYSDALE: I am interested in the nature of this item, "telephone, telegrams and cables," and in the item "telephone and telegraph communication networks leased for airways traffic control" in the amount of $1,825,474.

Mr. BALDWIN: That is an air traffic control item. I will give you the details of that.

The reason that item is very high is because air traffic control in order to function has to use communications from coast to coast. The traffic controller, whether in a tower or a centre, has to be able to talk not only to aircraft in

flight but to other towers and air centres on the basis of picking up a phone and not having to dial. They use direct phones because speed is essential in the controlling function.

The system is operated by using phones, and there are also teletype circuits operating on this system. The ATC operates on a very high volume of communication which is very expensive indeed. This breaks down into what is called the ATC interphone network which costs $724,272 per year to rent from the various telephone and telegraph companies, and it is spread between the Canadian Pacific and the Canadian National and the various provincial telephone companies.

This was the long line local which supplements it, and it cost another $4,000, and a certain number of special extensions which cover a great many individual items, roughly, $\frac{1}{2}$ million in total.

For example, another large item is the extension in respect to the interphone service from Yellowknife to Prince Rupert in the sum of $40,000; the leasing of another telephone circuit from Seven Islands to Goose, $92,000.

This would give you some idea of the type of costs that come under this item.

Mr. DRYSDALE: It is cheaper to lease these things than for the department to establish its own system?

Mr. BALDWIN: Yes, I think so. We make use of existing common carriers.

Mr. DRYSDALE: You keep a check on the eventual development and volume to see where it might reach a point where it is economically feasible to commence operations?

Mr. BALDWIN: That could happen, but I do not think we have achieved that position.

Mr. DRYSDALE: I would like to have a breakdown of the department's acquisition and construction of works and lands.

Mr. SMITH (*Simcoe North*): Wasn't it under that item that we had a statement when dealing with various airport construction which is now under way?

Mr. HEES: It covers it. That was just one part of it. This covers it.

Mr. SMITH (*Simcoe North*): It runs to runway construction.

Mr. BALDWIN: I could give you a breakdown of it by geographical districts or regions.

Mr. WRATTEN: Is the big increase not on account of the public works program we are trying to put in to alleviate unemployment?

Mr. HEES: No. This is necessary because in the near future we shall be using much larger aircraft in Canada which will need larger runways. The aircraft will be much heavier and will require longer runways, and all of this program is necessary. Some of it was speeded up during the past year.

Mr. WRATTEN: That is what I meant. It comes under this program of works.

Mr. HEES: Everything here would have been needed eventually anyway. It is just a matter of speeding up the program and in that way assisting unemployment.

Mr. HORNER (*Jasper-Edson*): May I ask about the present status of the Edmonton airport? Is construction proceeding according to schedule?

Mr. HEES: Yes.

Mr. HORNER (*Jasper-Edson*): Have any representations been made to the department particularly with regard to the trucking of gravel?

Mr. H. J. CONNOLLY (*Director of Construction Branch, Department of Transport*): There have been quite a number of letters received. The contractor doing about 70 per cent of the work was purchasing the gravel from a local gravel pit. It was supplied on the site on a tonnage basis.

Under our contract we have no provision for the actual rental of truck; but we have control over the truck operator with respect to the wages paid. We had been told that they were being underpaid so we had our Labour department inspector go up and he inspected the matter and he found that in some cases they were being paid slightly above the minimum rate.

I think this was a matter between the union and the gravel supplier rather than with the contractor.

Mr. HORNER (*Jasper-Edson*): Could we be told why the contractor for that particular airport is a foreign contractor, an American contractor? I understand that a Canadian company has been set up which is subsidiary to an American company, and I understand that it was an American contractor.

Mr. CONNOLLY: It is a joint venture between the Terminal Construction Company of Montreal and the Tallman Construction Company of Winnipeg. The former was the minority holder while the latter company held a 52 per cent interest. They are entirely Canadian companies.

The Terminal Construction Company of Montreal recently sold out to the Kaiser interests in the United States, and they incorporated a Canadian company and called it Terminal-Kaiser.

Mr. HORNER (*Jasper-Edson*): Was that after or before the tenders were made?

Mr. CONNOLLY: Whether it was before the tenders came in or after, I do not know.

While the former company has an interest in it, it is the Tallman Construction Company which is actually doing the work.

Mr. HORNER (*Jasper-Edson*): I understand this was the last contract let by the previous government, is that correct?

Mr. BALDWIN: I would not be aware of it.

Mr. HEES: If the low bid is made by a contractor which is a subsidiary of an American company we would have no reason to refuse to award the contract to that company, as long as it is a Canadian company. A Canadian subsidiary of an American company is considered to be a Canadian company.

Mr. HORNER (*Jasper-Edson*): I understand it was a Canadian subsidiary of an American company formed for this particular job.

Mr. GARLAND: I would like to express my thanks to the minister for the recent letter outlining the decision concerning the policy at North Bay. It was very much appreciated by our people. I wonder, when the appropriate officials are here, if there will be anything new to report on it?

Mr. CONNOLLY: We are going to carry on the service this year. It may have started now for the new civil area. I mean the terminal building.

Mr. GARLAND: It is under way now.

Mr. CONNOLLY: If not, it will be under way in the next two or three weeks.

The CHAIRMAN: Are there any other questions?

Mr. DRYSDALE: I would be satisfied to have a mimeographed outline of that $62,221,000.

Mr. BALDWIN: An outline would be very lengthy because it runs to 60 pages. I could give you the original breakdown if that would be of any help, under what we call districts, which conform with the provinces.

Mr. HEES: Might I suggest that if Mr. Drysdale would like to look at any particular item he will be welcome to do so; the departmental officials will show him any item he wants.

Mr. DRYSDALE: That is advisable and I shall follow it up myself.

Mr. CREAGHAN: What about the regional breakdown?

Mr. BALDWIN: We segregated Gander because it is a special program. Roughly, it is $3 million this year.

The Moncton district, which includes Halifax, New Brunswick, Prince Edward Island and Newfoundland amounts roughly to $8 million.

The Montreal district which covers the general Quebec area, of course, roughly amounts to $15,600,000.

The Toronto district which covers the province of Ontario amounts roughly to $11,600,000.

The Winnipeg district which covers Manitoba as well as eastern Saskatchewan, amounts roughly to $5½ million.

The Edmonton district which covers Alberta as well as western Saskatchewan, I believe, and the Northwest Territories, amounts roughly to $12½ million.

The Vancouver district which covers British Columbia amounts roughly to $7.3 million.

Then there are some small additional items for headquarters in the Quebec district and assistance in plans for a proposed airport, and the total of all of them would be $1½ million.

Mr. MCBAIN: What apportionment has been set aside for the London airport?

Mr. BALDWIN: Primarily the work contemplated at London is a project for stand-by power generating equipment.

Mr. MCBAIN: How many thousands?

Mr. BALDWIN: Around $25,000 I am told.

Mr. ALLMARK: Is there any item allocated here for the airport at Kingston?

Mr. HEES: There is an item for the enlarging of the terminal which will cost over $100,000.

Mr. ALLMARK: That is for the acquisition of land?

Mr. BALDWIN: The decision to acquire some additional land was taken subsequent to the preparation of these estimates, and it is still in the planning stage. It is not an item for which funds are specifically earmarked, but we hope to go ahead with the acquisition of land.

Mr. BRASSARD (*Chicoutimi*): Have you anything set aside for the Saguenay airport and for Bagotville?

Mr. BALDWIN: What is being done this year is to relocate the present small terminal building. Then there is a longer term project for the development of additional civil terminal facilities but it is not expected that we can make much of a start on that this year.

Item agreed to.

Supplementary Item 647 agreed to.

Mr. CHAIRMAN: Thank you. We have a number who have another place to go to. So we shall meet here next Tuesday at 10 o'clock in the morning in this same room.

EXPLANATION OF ITEM 452

This vote includes provision for all expenditures on new construction of radio facilities, necessary for the operation of airways, airports and marine navigation. It also provides for the reconstruction of, or improvements to, fixed assets such as Radio Range Stations, Communication Facilities, Coast Stations, radio installations for Instrument Landing Systems, Beacons and other miscellaneous aids to Air and Marine Navigation.

Provision is also made for the acquisition of furniture for new dwellings as well as the acquisition of equipment and tools for normal operation of radio aids to navigation.

The D.N.D. recoverable item $123,075 covers cost to be borne by them for provision of space in transmitter buildings for their transmitter as well as construction of a dwelling at Kenora required for Air Movement Information Services—$676,000.

Very High Frequency Omni Ranges (VOR)

The visual Omni Range program provides for a start on installations at 8 locations east of the present Montreal to Windsor VOR Airway at an estimated cost $195,000 in 1958/59. $75,000 is required for completion of the Lakehead VOR on the Toronto-Winnipeg Airway. Completion of the Winnipeg-Lethbridge and initial stages of the Winnipeg-Edmonton VOR airway will require $200,000 and the initial stages of the Lethbridge-Vancouver VOR airway will require $70,000. A further $5,000 will be required for a VOR at North Bay, Ont. and $131,000 for apparatus for use at each VOR site—$256,000.

Instrument Landing Systems (ILS)

ILS installations are provided for at Seven Islands, Quebec, Fort St. John, B.C., Whitehorse, Y.T., Port Hardy, B.C. and Prince George, B.C. at a first stage cost of $75,000. Relocations due to runway changes and additions to existing ILS installations will require $81,000 while $100,000 (of a total estimated cost of $1,820,000) is provided for initial deliveries of apparatus for use on new ILS installations and for replacement of obsolete equipment—$4,976,500.

Radar

The program for installation of airport and airways surveillance radars will require $672,500 for installations at Halifax, N.S., Moncton, N.B., Quebec, P.Q., Ottawa, Ont., North Bay, Ont, Lakehead, Ont, Kenora, Ont, Regina, Sask, and Calgary, Alta., while $4,045,000 will be required for apparatus for use at all sites. $125,000 is provided for 2 Radar Scan Conversion Equipments and $100,000 for studies on Air Traffic Control Display and Computation Systems. Replacement of the Radar and Communications equipment on the First Narrows Bridge at Vancouver, B.C. will require $30,000 and $4,000 is required for video amplifying equipment at Gander, Nfld.—$831,000.

Low Frequency and High Frequency Aids

Provision of Non Directional Beacon installations for air navigation, airport approach and ATC will require $400,000. Additional Marine Beacons and improvements to existing Marine Beacons will require $126,000. Radio Equipment for installation at these beacons will require $305,00—$3,266,200.

Communications

Provision of improvements to stations providing Aeronautical and Meteorological Communications will require $1,389,400 and establishment of

new stations and improvements to existing stations providing marine ship-shore communications will require $694,000. Purchase of radio apparatus and masts will require $1,182,800—$938,000.

Dwellings

The item for dwellings provides for all expenditures at locations where dwellings form a part of the project. Of this total $653,000 is required for dwellings and $285,000 is required for a Very High Frequency Omni Range and Non-Directional Beacon at Beechy, Saskatchewan, an Instrument Landing System Localizer at Terrace, B.C., Non-Directional Beacons at Lac la Biche, Alta., Norman Wells, NWT, Wrigley, NWT, and Fort Simpson, NWT, and the move of the Dog Creek Radio Range to Williams Lake, B.C.—$1,166,500.

Miscellaneous

This item provides $116,500 for building and site improvements and for construction of garages and storage facilities. It also provides $105,000 for a start on radio facilities at Halifax International Airport and at Prince Rupert Airport. An amount of $20,000 is included for experimental work at Ottawa Headquarters and $925,000 for Electrical Generating Plants for Radar, VOR, ILS and Communication Stations—$652,650.

Construction or Acquisition of Equipment

This item provides $325,000 for radio installations in DOT Aircraft and Airport vehicles, $75,000 for tools and test equipment, $120,000 for furniture for Telecommunication dwellings and $132,650 for motor vehicles, for station maintenance and Regional office transportation.